

Abstract

WIRELESS COMMUNICATION UNIT AND WIDEBAND VOLTAGE CONTROLLED OSCILLATOR THEREFOR

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A wireless communication unit (100) comprises a voltage controlled oscillator (123) having an active device (450) operably coupled to a first variable capacitance (425) to provide a variable capacitance value based on an applied steering line voltage, and a feedback network comprising a resonator (475),

10 operably coupled to an output of the active device, for feeding power back to an input of the active device to sustain oscillations (123). Notably, a second variable capacitance is operably coupled to receive a control voltage from the steering line (405) and located between the resonator (475) and the active device (450).